

DRILLING LOG

Page 1 of 2State Elyria, OhioStart Date August 4, 1981Site Chemical Recovery Systems, Inc.Completion Date August 4, 1981Boring No. W-1Ground El. 701.93Drilling Firm H.C. Nutting Co.Groundwater El.
at completion 686.43Type of Drill CME 750after 43 days 686.85Driller J. MartinTotal Depth of Boring 23.0Geologist Mark Hutson

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
701.93		Ground Surface				
693.93	1	<u>Sandy Clay w/ gravel (fill)</u> Brown	2-5-8	1		
	2					
	3	Same	2-7-11	2		
	4					
	5					
	6		3-2-7	NR		
	7					
	8					
	9	<u>Brick and Cinders (fill)</u>				

2/12/82

State Elyria, OhioBoring No. W-1Site Chemical Recovery Systems, Inc.Page 2 of 2

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
687.93	11	<u>Brick and Cinders (fill)</u> Black	1-2-3	4		
	12					
	13					
	14					
683.93	15	<u>Clayey Sand</u> Gray	1-1-1	5		
	16					
	17					
	18					
678.93	19	<u>Sand</u> Gray, fine to medium grain	1-2-2	6		
	20					
		End of Boring				
		Well specifications - 15.5' of galvanized pipe - 10.0' of well screen (stainless steel) - Pea gravel packing - bentonite seal - stick-up = 2.66'				

2/12/82

DRILLING LOG

Page 1 of 2State Elyria, OhioStart Date August 4, 1981Site Chemical Recovery Systems, Inc.Completion Date August 4, 1981Boring No. W-2Ground El. 701.3Drilling Firm H.C. Nutting Co.Groundwater El.
at completion 688.8Type of Drill CME 750after 43 days 687.13Driller J. MartinTotal Depth of Boring 23.0Geologist Mark Hutson

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
701.3		Ground Surface				
	1	Sandy Clay w/ gravel and cinders Brown (fill)	6-5-5	1		
	2					
	3		2-2-5	2		
	4					
	5					
	6	Sandy Clay w/ gravel and cinders Gray (fill)	2-2-3	3		
	7					
	8					
	9					

2/12/82

State Elyria, OhioBoring No. W-2Site Chemical Recovery Systems, Inc.Page 2 of 2

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
688.3	11	<u>Sandy Clay w/ coal (fill)</u> Gray	2-2-2	4		
	12					
	13					
683.3	14					
	15					
	16	<u>Sand and Gravel (fill)</u> Brown	7-7-13	5		
678.3	17					
	18					
	19					
	20	<u>Sandy Clay w/ organics</u> Gray	3-2-3	6		
		End of boring				
		Well specifications - 15.5' of galvanized pipe - 10.0' of well screen (stainless steel) - pea gravel packing - bentonite seal - stick-up = 2.53'				

2/12/82

DRILLING LOG

Page 1 of 1State Elyria, OhioStart Date August 4, 1981Site Chemical Recovery Systems, Inc.Completion Date August 4, 1981Boring No. B-3Ground El. 708.48Drilling Firm H.C. Nutting Co.Groundwater El.
at completion NoneType of Drill CME 750after days Driller J. MartinTotal Depth of Boring 4.5Geologist Mark Hutson

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
708.48		Ground Surface				
703.98	1	<u>Sandy Clay and Gravel (fill)</u> Gray	14-13- 30	1		
	2					
	3	<u>Sandy Clay and Gravel (fill)</u> Brown	3-9-7	2		
	4	End of boring				
	5					
	6				<u>Sandstone</u>	
	7					
	8					
	9					

2/12/82

DRILLING LOG

Page 1 of 1State Elyria, OhioStart Date August 4, 1981Site Chemical Recovery Systems, Inc.Completion Date August 4, 1981Boring No. B-4Ground El. 703.61Drilling Firm H.C. Nutting Co.Groundwater El.
at completion NoneType of Drill CME 750after days Driller J. MartinTotal Depth of Boring 5.0Geologist Mark Hutson

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
703.61		Ground Surface				
698.61	1	<u>Gravel (fill)</u> Brown	5-11 -10	1	<u>Sandstone</u>	
	2					
	3	<u>Sandy Clay and Gravel (fill)</u> Brown and Gray	12-13 13	2		
	4					
	5					
	6					
	7					
	8					
	9					

2/12/82

DRILLING LOG

Page 1 of 1State Elyria, OhioStart Date August 4, 1981Site Chemical Recovery Systems, Inc.Completion Date August 4, 1981Boring No. B-5Ground El. 707.46Drilling Firm H.C. Nutting Co.Groundwater El.
at completion NoneType of Drill CME 750after days Driller J. MartinTotal Depth of Boring 10.0Geologist Jerome Oskvarek

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
707.46		Ground Surface				
699.46	1	Gravel and Cinders (fill)	5-10-5	1	chemical analysis	
	2					
	3	Sandy Clay and Gravel (fill)	3-2-3	2	chemical analysis	
	4	Brown				
	5					
	6	Gray	2-3-1	3	chemical analysis	
	7					
	8	Weathered				
	9	Sandstone				
		End of boring				

2/12/82

DRILLING LOG

Page 1 of 2State Elyria, OhioStart Date August 4, 1981Site Chemical Recovery Systems, Inc.Completion Date August 4, 1981Boring No. B-6Ground El. 701.23Drilling Firm H.C. Nutting Co.Groundwater El.
at completion NoneType of Drill CME 750after days Driller J. MartinTotal Depth of Boring 15.0Geologist Mark Hutson

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
701.23		Ground Surface				
	1	<u>Sandy Clay and Gravel (fill)</u> Gray	10-11- 12	1	chemical analysis	
	2					
	3	Brown	4-4-3	2	chemical analysis	
	4					
	5	<u>Sandy Clay and Gravel (fill)</u>				
	6	Brown	1-1-1	3		
	7					
	8					
	9					

2/12/82

State Elyria, OhioBoring No. B-6Site Chemical Recovery Systems, Inc.Page 2 of 2

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
687.23	11	<u>Sandy Clay and Gravel (fill)</u> Brown	1-1-3	4	chemical analysis	
	12					
	13					
	14	End of boring				
	15				<u>Sandstone</u>	
	16					
	17					
	18					
	19					
	20					

2/12/82

DRILLING LOG

Page 1 of 2State Elyria, OhioStart Date August 4, 1981Site Chemical Recovery Systems, Inc.Completion Date August 4, 1981Boring No. B-7Ground El. 708.48Drilling Firm H.C. Nutting Co.Groundwater El.
at completion 695.48Type of Drill CME 750after days Driller J. MartinTotal Depth of Boring 16.5Geologist Mark Hutson

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
708.48		Ground Surface				
703.48	1	<u>Sandy Clay and Gravel (fill)</u> Gray	1-2-5	1	chemical analysis	
	2					
	3	Brown	2-3-4	2	chemical analysis	
	4					
	5					
	6	<u>Sandy Clay w/ concretions</u> Gray	13-7-8	3		
	7					
	8					
	9	Same				

2/12/82

Boring No. B-7

Page 2 of 2

2/12/82

DRILLING LOG

Page 1 of 2State Elyria, OhioStart Date August 5, 1981Site Chemical Recovery Systems, Inc.Completion Date August 5, 1981Boring No. B-8Ground El. 708.79Drilling Firm H.C. Nutting Co.Groundwater El. 694.29
at completionType of Drill CME 750after daysDriller J. MartinTotal Depth of Boring 15.5Geologist Jerome Oskvarek

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
708.29		Ground Surface				
	1	<u>Sandy Clay and Gravel (fill)</u> Gray	2-3-5	1	chemical analysis	
	2					
	3	Brown	3-2-3	2	chemical analysis	
	4					
	5	<u>Sandy Clay and Gravel (fill)</u>				
	6	Brown	3-3-4	3	chemical analysis	
	7					
	8	Same	3-3-4	4		
	9					

2/12/82

State Elyria, OhioBoring No. B-8Site Chemical Recovery Systems, Inc.Page 2 of 2

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
693.29	11	<u>Gravel and Cinders (fill)</u> Black	2-1-2	5	chemical analysis	
	12					
	13					
	14					
	15					
	16	<u>Sandstone</u>	50	6	chemical analysis	
	17					
	18					
	19					
	20					

2/12/82

DRILLING LOG

Page 1 of 1

State Elyria, Ohio

Start Date August 5, 1981

Site Chemical Recovery Systems, Inc.

Completion Date August 5, 1981

Boring No. B-9

Ground El. 708.29

Drilling Firm H.C. Nutting Co.

Groundwater El.

Type of Drill CME 750

at completion None

Driller J. Martin

after days

Geologist Jerome Oskvarek

Total Depth of Boring 4.0

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
708.29		Ground Surface				
706.29	1	<u>Gravel and Cinders (fill)</u> Gray	15-16 -30	1	chemical analysis	
704.79	2					
	3	<u>Sandy Clay</u> Brown	3-4	2	chemical analysis	
	4	End of boring				
	5	<u>Sandstone</u>				
	6					
	7					
	8					
	9					

2/12/82

DRILLING LOG

Page 1 of 3State Elyria, OhioStart Date September 15, 1981Site Chemical Recovery Systems, Inc.Completion Date September 15, 1981Boring No. W-3Ground El. 708.42Drilling Firm H.C. Nutting Co.Groundwater El.
at completion 698.42Type of Drill CME 750after 1 day 697.35Driller J. MartinTotal Depth of Boring 34.0Geologist Rod Bloese / Ron St. John

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
708.42		Ground Surface				
704.92	1	<u>Sandy Clay and Gravel (fill)</u>				
	2					
	3					
703.92	4	<u>Weathered Sandstone</u>				
	5	<u>Sandstone</u> - light gray, poor to moderately indurated, very fine grained, very well sorted, well rounded, silica cement, highly permeable, arenitic with trace muscovite and ferromagnetic minerals. Fractures one to four inches apart, iron staining prevalent at top and decreasing w/ depth. Fractures at top contain silty clay fill material, indicating down fracture migration.				
	6					
	7					
	8					
	9					

2/12/82

State Elyria, OhioBoring No. W-3Site Chemical Recovery Systems, Inc.Page 2 of 3

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
697.42	11					
	12	Same without fractures and staining				
	13					
	14					
	15					
	16					
	17					
	18					
	19					
	20					
686.42						
	25	Same with fractures four inches to one foot apart containing hematite and limonite. Organic inclusions are present, as are coal forming with pyrite				
680.42						
		Same with organic inclusions and no fracturing				

2/12/82

State Elyria, OhioBoring No. W-3Site Chemical Recovery Systems, Inc.Page 3 of 3

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
674.42	31	Same with organic inclusions and no fracturing				
	32					
	33					
	34					
	35	End of boring				
	25	Well specifications - 26.2' of galvanized pipe - 10.0' of well screen (stainless steel) - bentonite seal at bedrock surface - grout from bentonite to surface - stick-up = 1.89'				

2/12/82

DRILLING LOG

Page 1 of 3State Elyria, OhioStart Date September 15, 1981Site Chemical Recovery Systems, Inc.Completion Date September 15, 1981Boring No. W-4Ground El. 707.90Drilling Firm H.C. Nutting Co.Groundwater El.
at completion 697.90Type of Drill CME 750after 1 day 696.29Driller J. MartinTotal Depth of Boring 33.5Geologist Rod Bloese / Ron St. John

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
707.90		Ground Surface				
703.60	1	<u>Sandy Clay and Gravel (fill)</u>				
	2	Gray				
	3					
	4					
	5	<u>Sandstone</u> - light gray, poor to moderately indurated, very fine grained, very well sorted, well rounded, silica cement, highly permeable, arenitic with trace muscovite and ferromagnetic minerals. Fracturing one to four inches apart and filled with silty clay and iron staining, indicating down fracture migration.				
	6					
	7					
	8					
	9					

2/12/82

State Elyria, OhioBoring No. W-4Site Chemical Recovery Systems, Inc.Page 2 of 3

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
696.90	11	Same				
	12	Same with fracture four inches to one foot apart and with less filling				
	13					
693.90	14					
	15	Same with fractures four to six inches apart and containing hematite, limonite, muscovite and organics				
	16					
	17					
	18					
689.40	19	Same with few fractures and little staining				
	20					

2/12/82

Page 3 of 3

[illegible]

2/12/82